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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/617,140	07/14/2000	Jang-Ho Park	P56133	5702

8439 7590 06/29/2004

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EXAMINER

MCCARTHY, CHRISTOPHER S

ART UNIT PAPER NUMBER

2113

DATE MAILED: 06/29/2004

18

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/617,140

Applicant(s)

PARK ET AL.

Examiner

Christopher S. McCarthy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-7,9-15,19-21,24 and 25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-15 and 25 is/are allowed.
- 6) ☒ Claim(s) 4-7,19-21 and 24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 July 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>Response to arguments</u> . |

DETAILED ACTION

1. Claims 19-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Dornier U.S. Patent 5,646,535, as cited in prior office action, which was mailed on 2/10/2004.

2. Claims 4-7, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dornier in view of Nanno et al. U.S. Patent 5,553,294, as cited in prior office action, which was mailed on 2/10/2004.

3. Claims 9-15, and 25 are allowed, as cited in prior office action, which was mailed on 2/10/2004.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 19-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Dornier U.S. Patent 5,646,535.

As per claim 19, Dornier discloses a method of displaying power-on self-test codes in a portable computer system, comprising the steps of starting a power-on self-test (column 1, lines 44-50); generating power-on self-test codes (column 1, lines 44-50; column 1, lines 62-66);

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outputting the power-on self-test codes to a microcomputer to display the power-on self-test codes (column 1, lines 44-50, wherein the microcomputer is inherent in the computer system of Dornier; testing each one of the elements of the portable computer system corresponding to the respective power-on self-test codes (column 3, lines 49-53); determining whether the test is performed in safety (column 4, lines 15-17); completing the power-on self-test process when the test is performed in safety an all of the elements (column 4, lines 15-17); and interrupting the power-on self-test process when the test is not performed in safety in any element (column 4, lines 43-45); said step of displaying the power-on self-test codes further comprising of receiving data through a predetermined input-output port of said microprocessor of the portable computer (column 2, line 65 – column 3, line 4; column 3, line 66 – column 4, line 4); generating an internal interrupt when the data is inputted to said microprocessor (column 3, lines 59-63); checking whether the data inputted through the predetermined input-output port of the microprocessor is a power-on self-test code (column 3, lines 59-63); displaying the power-on self-test code through an indicator when data inputted is a power-on self-test code (column 3, lines 59-63); and executing other interrupt routines when data is not a power-on self-test code (column 1, lines 57-61).

As per claim 20, Dornier discloses the method of claim 19, with said indicator being a plurality of light emitting diodes, with each power-on self-test code corresponding to a specific light emitting diode on the portable computer (column 1, lines 62-66).

As per claim 21, Dornier teaches the method of claim 20, with said light emitting diodes sequentially aligned along a surface of the portable computer according to an order of operating

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states being tested by the portable computer, the alignment accommodating a rapid view of a progress of the power-on self-test (column 5, lines 15-19; column 2, lines 50-58).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-7, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dornier in view of Nanno et al. U.S. Patent 5,553,294.

As per claim 4, Dornier discloses a portable computer system comprising of an indicating device having a plurality of light emitting devices selectively activated according to a signal from the portable computer system (column 1, lines 44-50); and a controller managing said indicating device to selectively display power-on self-test (POST) codes in response to operating states of the portable computer system, (column 1, lines 44-50; column 1, line 66 – column 2, line 4; column 3, lines 45-53) the power-on self-test codes being generated in power-on self-test process by a basic input-output system (BIOS) of the computer system (column 3, lines 45-53). Although Dornier does disclose the operating states of a power on or off state, and an access state of a disk drive (column 2, lines 52-56), Dornier does not specifically teach the use of a number lock state, a capital lock state, a scroll lock state, and a charge state of the battery. However, Nanno teaches the operating states comprising of a power on or off state, number lock

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state, a capital letter state, a scroll lock state, an access state of a disk drive, and a charge state of the battery (figure 5A; column 4, lines 55-59; column 5, lines 19-30). It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the operating states of Nanno to the system of Dornier. One of ordinary skill in the art at the time the invention was made would have been motivated to utilize the operating states of Nanno to the system of Dornier because Nanno teaches the displaying of a plurality of states of objects in the computer system corresponding to state LED's (column 4, lines 55-59). This display is an explicit desire taught by Dornier (column 5, lines 15-23), wherein, Dornier teaches that more state LED's can be used to further enhance to inventive concept.

As per claim 5, Dornier teaches the portable computer system of claim 4, with said indicating device being a plurality of light emitting diodes, with each power-on self-test code corresponding to a specific light emitting diode on the portable computer (column 1, lines 62-66).

As per claim 6, Dornier teaches the portable computer system of claim 5, with said light emitting diodes sequentially aligned along a surface of the portable computer according to an order of operating states being tested by the portable computer, the alignment accommodating a rapid view of a progress of the power-on self-test (column 5, lines 15-19; column 2, lines 50-58).

As per claim 7, Dornier teaches the portable computer system of claim 6, with the light emitting diodes indicating where an error has occurred in the portable computer system (column 1, lines 41-50).

As per claim 24, Dornier teaches a computer, comprising of an indicating device having a plurality of light emitting devices activated according to a signal from the computer (column 1,

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lines 44-50); and a controller managing said indicating device to display power-on self-test codes in response to operating states of the computer, the power-on self-test codes being generated in power-on self test process by a basic input-output system of the computer system (column 3, lines 45-53). Although Dornier does disclose the operating states of a power on or off state, and an access state of a disk drive (column 2, lines 52-56), Dornier does not specifically teach the use of a number lock state, a capital lock state, a scroll lock state, and a charge state of the battery. However, Nanno teaches the operating states comprising of a power on or off state, number lock state, a capital letter state, a scroll lock state, an access state of a disk drive, and a charge state of the battery (figure 5A; column 4, lines 55-59; column 5, lines 19-30). It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the operating states of Nanno to the system of Dornier. One of ordinary skill in the art at the time the invention was made would have been motivated to utilize the operating states of Nanno to the system of Dornier because Nanno teaches the displaying of a plurality of states of objects in the computer system corresponding to state LED's (column 4, lines 55-59). This display is an explicit desire taught by Dornier (column 5, lines 15-23), wherein, Dornier teaches that more state LED's can be used to further enhance to inventive concept.

Allowable Subject Matter

6. Claims 9-5, and 25 are allowed.

Response to Arguments

7. Applicant's arguments filed 5/3/2004 have been fully considered but they are not persuasive.

With respect to claims 4 and 19, the applicant argues that Dornier fails to disclose the selective display of the POST codes. The examiner respectfully disagrees. The selective display of any POST codes are directed upon the BIOS of the system. Dornier teaches in column 1, line 62 through column 2, line 4, that the POST routine is used to direct the changes to the LED's. The selectivity of different LED's according to POST code is done by the BIOS. Also, Dornier teaches in column 1, line 53, that a state of the LED may be off in response to the POST code. Therefore, the BIOS/POST routine selects an absence of a display of the LED as the resultant of the POST code. This fulfills the selected display of the LED as done by the BIOS. Therefore, all applicable rejected claims stand rejected.

With respect to claim 20, the applicant argues that Dornier fails to disclose the limitation of each power-on self-test code corresponding to a specific light emitting diode on the portable computer. The examiner respectfully disagrees. Dornier teaches in column 1, lines 59-61, that one LED can be used in presenting POST operations. Therefore, by using just one LED for the POST routine, each code of the routine would have only one specific LED corresponding to it. Also, the present invention only cites six LED's for presenting POST codes. According to the present invention, if BIO/POST routine is utilized in this system, it can only have 6 POST codes if each code must have its own LED. Any more than six codes being performed upon a POST routine would require the sharing of an LED. The examiner respectfully presents this contradiction upon further examination of the specification, wherein, on page 8, paragraph 2, the specification cites POST codes to test various components such as a graphics controller, and

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various other chip sets in the system. LED's for these components are not enabled according to figure 2. The examiner advises the applicant that this feature is not enabled if the applicant's argument contends that every POST code must have its own LED. All applicable rejected claims stand rejected.

With respect to claims 6 and 21, the applicants argue that Dornier does not disclose the light emitting diodes sequentially aligned along a surface of the portable computer. The examiner respectfully disagrees. Dornier teaches in column 2, lines 50-58, an LED display on the front panel of the computer. This teaching is further enhanced by figure 1, wherein the LED's are shown to be in sequential order. Therefore, all applicable rejected claims stand.

With respect to claim 24, the applicant argues that Nanno does not teach any POST processing with respect to the LED display and further argues there is no motivation to combine Nanno with Dornier. The examiner respectfully disagrees. Nanno does teach the utilization of a power on routine to determine the states of the components (column 13, lines 44-48). This is interpreted to be a POST routine, as is well-known in the art to be performed at a power on step. Furthermore, as cited in prior office action rejection of claim 24, the motivation to combine Nanno to Dornier is an explicit teaching of Dornier to utilize more LED's in another embodiment of the Dornier invention (column 5, lines 19-27). Dornier teaches the use of more LED's to enhance the number of possible POST codes to be run and the results to be displayed. Therefore, the display of LED's of Nanno, which contains more LED's to fulfill this enhancement would be desired by Dornier. Therefore, all applicable rejected claims stand.

Conclusion

8. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher S. McCarthy whose telephone number is (703)305-7599. The examiner can normally be reached on M-F, 8 - 4:30.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (703)305-9713. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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